



24 July 1992

Reply to
Attn of: ES-095

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MEMORANDUM

Subject: QA Comments on Data for the Yakima Agricultural
Research Laboratory

From: Bruce A. Woods, Ph.D.
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Thru: Raleigh Farlow
Chief, TSS, QA Management Branch

To: Lynda Priddy
Superfund

The QA Branch was asked to review reports and documents for the U.S.D.A. Yakima Agricultural Research Laboratory. The purpose of the review was to determine the quality of the data generated at this site to support a CERCLA clean closure and deletion of this site from the NPL. Initially a number of documents were submitted to this office for review. Many of those documents were not relevant to our review, i.e., RCRA facility inspection reports, etc. We limited our review to what we felt were the key documents to support a clean closure determination. The review performed by this office was a technical review of the data and documentation supporting the data. We did not attempt to review the laboratory results against regulatory or other action limits. The following comments are offered:

Quarterly Ground Water Monitoring Report, Yakima Agricultural
Research Laboratory, Quarter No. 5- October 1991

This document is dated November 1, 1991 and was prepared by Hong West & Associates.

1. In Appendix 2-2 Original Laboratory Data and Chain of Custody are the data reports provided by the laboratory, Biospherics Incorporated. The laboratory performed analyses for pesticides/PCBs, organophosphorus pesticides, volatile organics, herbicides, and metals on groundwater samples. Except for some positive results for some of the metals, the laboratory did not report any positive results for the organic compound analyses at the practical quantitation limits determined for each method. No supporting quality control information is reported for any of these analyses except a surrogate recovery for an unspecified compound used in the organophosphorus pesticide analyses.



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No supporting documentation is provided to allow an assessment of the analyses performed in the following areas: instrument calibration, mass spectrometer tuning, use of surrogates to determine analyte recovery (with the exception noted above), precision or accuracy through analyses of duplicate samples or matrix spike samples, method preparation blanks for assessing possible lab contamination.

This data set is of limited use, due to the lack of documentation provided in these reports to determine data quality.

Hakima Agricultural Research Laboratory, Closure Certification Report, Hazardous Waste Septic System Remediation, Volume I of II

This report is dated November 19, 1991 and was prepared by Hong West and Associates.

2. On p. 7, it is stated that Biospherics Laboratories performed the analyses and Sweet-Edwards/Emcon was responsible for reviewing the data. On p. 13, are listed the following analyses that were performed: volatile organics, semi-volatiles, organophosphorus pesticides, organochlorine pesticides/PCBs, metals, and cyanide. On p. 17, it states that data was reviewed for appropriate holding times, chain-of-custody documentation, and adequacies of blanks, duplicates, and surrogates. In Appendix C QA/QC Data, are the data validation reports provided by Sweet-Edwards/Emcon. In Section III. Findings, bullet six, it is stated that the laboratory reported acceptable blank, spike and surrogate results but did not provide detailed written documentation.

As part of the data validation reports are a number of forms used by the data validators entitled:

Quality Assurance Check Sheet Level 1. This check sheet appears to apply to organic analyses data review. This sheet lists a response of NO to Methods Acceptable. We believe the reason for this is that under the sub-headings of Calibration/Std's, Blanks, Duplicates, and Spikes are responses of "not provided." It is possible that the laboratory services contract did not require this information as a documented deliverable.

QA/QC CLP Process Sheet Level 2. This sheet appears to apply to metals analysis data review. It lists a response of NO under the heading Acceptable to the following criteria: Instrument Calibration, AA/ICP Std's, Blanks, ICP Interference, Spike Recovery, Surrogate Recovery, and Duplicates (Lab). Under Comments is states that this information was "not provided."

As stated above, for the first report, documentation was not obtained for this the second report, to allow an evaluation of these areas to determine the quality of this data. Therefore, the usability of this data set is limited.

After a conference call with the USDA, on 22 July 1992, we asked USDA to determine if the raw laboratory data was still available at the laboratory and if it could be obtained for review. If the data is available and can be obtained we may reduce the deficiencies in this data set that appear to have arisen because this information was not requested as a documentation deliverable in the laboratory services contract.

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